



**NEWBURN URBAN DISTRICT**  
(County of Northumberland)

—  
**Annual**  
**REPORT**  
of the  
**Medical Officer of Health**  
and of the  
**Senior**  
**Public Health Inspector**  
**for 1966**



Digitized by the Internet Archive  
in 2018 with funding from  
Wellcome Library

<https://archive.org/details/b29903385>

NEWBURN URBAN DISTRICT  
(County of Northumberland)

---

Annual  
**REPORT**  
of the  
**Medical Officer of Health**  
and of the  
**Senior**  
**Public Health Inspector**  
for 1966

# Health Committee Members

1966-67

---

*Chairman:*

Councillor Mrs. E. WATSON

*Deputy Chairman:*

Councillor S. CHAPMAN

Councillor C. A. WOODS

„ J. D. FRAZER

„ J. W. LEA

„ M. WALKER

„ J. KEARMAN

„ Mrs. E. B. HIBBARD

„ W. H. F. SHACKLETON

„ J. F. LENEGHAN

# Officers of the Public Health Department

---

*Medical Officer of Health:*

H. C. T. SMITH, M.B., CH.B., D.P.H., D.P.A.

*Senior Public Health Inspector:*

JOHN CORNEY, M.R.S.H., M.A.P.H.I.

*Additional Public Health Inspector:*

GEORGE GRAHAM, A.R.S.H., M.A.P.H.I. (resigned 25th June, 1966)

*Additional Public Health Inspectors:*

PETER McCONVILLE, M.R.S.H., M.A.P.H.I. (appointed 10th August, 1966)

DAVID GRANVILLE JONES, M.R.S.H., M.A.P.H.I.  
(appointed 15th August, 1966)

*Pupil Public Health Inspector:*

TREVOR HARRIS

*Clerk/Shorthand Typist:*

Miss L. THOMPSON

*Junior Clerk:*

Miss A. TAYLOR



# Annual Report of the Medical Officer of Health

Telephone: Lemington 674112/3

COUNCIL OFFICES,  
NEWBURN,  
NEWCASTLE UPON TYNE, 5

*To the Chairman and Members of the Urban District Council of Newburn*

MR. CHAIRMAN, MRS. WATSON AND GENTLEMEN,

It is my honour to present the Report on the health of the district during 1966.

The general and vital statistics are set out and figures given for tuberculosis, infectious disease and immunisation. Finally there are some facts, figures and comments on the subject of clean air, in which Newburn has made notable progress.

The work of the department was made easier by the friendly co-operation of the other officers of the Council and of many individuals in the district. I would again like to thank the members of the Council for their active support of the work of the department.

I am,

Yours faithfully,

H. C. T. SMITH,

*Medical Officer of Health.*

# Newburn Urban District

## GENERAL STATISTICS

Area in acres	....	....	....	....	....	....	4,648
Registrar General's estimated population	....	....	....	....	....	....	32,480
Number of inhabited houses according to rate book	....	....	....	....	....	....	10,473
Rateable value	....	....	....	....	....	....	£1,034,603
Sum represented by Penny Rate	....	....	....	....	....	....	£4,150

### Population trends :

1951	....	....	....	....	21,890
1956	....	....	....	....	25,020
1961	....	....	....	....	27,980
1962	....	....	....	....	29,000
1963	....	....	....	....	30,100
1964	....	....	....	....	30,730
1965	....	....	....	....	31,630
1966	....	....	....	....	32,480

## VITAL STATISTICS

		NUMBERS			RATES	
		M.	F.	Total.		
<i>Live Births</i>	....	....	....	297	245	542
Crude birth rate per 1,000 population						16.68
Comparability factor, 0.97						
Adjusted birth rate per 1,000 population						16.19
<i>Illegitimate Live Births</i>	....	....	....	10	14	24
Illegitimate live birth rate per 100 live births	....	....	....			4.45
<i>Still-births</i>	....	....	....	3	2	5
Still-birth rate per 1,000 live and still-births	....	....	....			9.12
<i>Total Live and Still-births</i>	....	....	....	300	247	547
<i>Infant Deaths</i> (Deaths in first year of life)				6	4	10
Infant mortality rate per 1,000 live births	....	....	....			18.45
Legitimate infant mortality rate per 1,000 legitimate live births	....	....	....			19.31
Illegitimate infant mortality rate per 1,000 illegitimate live births	....	....	....			Nil
<i>Neonatal Deaths</i> (Deaths in first four weeks of life)	....	....	....	3	3	6
Neonatal mortality rate per 1,000 live births	....	....	....			11.07
<i>Early Neonatal Deaths</i> (Deaths in first week of life)	....	....	....	3	2	5
Early neonatal mortality rate per 1,000 live births	....	....	....			9.23
<i>Perinatal Deaths</i> (Still-births, plus deaths in first week of life)	....	....	....	6	4	10
Perinatal mortality rate per 1,000 total live and still-births	....	....	....			18.28
<i>Maternal Deaths</i> (Deaths resulting from childbirth or abortion)	....	....	....		1	
<i>Deaths</i>	....	....	....	169	166	335
Crude death rate per 1,000 population	....	....	....			10.31
Comparability factor, 1.24						
Adjusted death rate per 1,000 population	....	....	....			12.78

**COMPARISON WITH PREVIOUS YEARS**

Year	(Adjusted) Birth Rate	Illegitimate Live Birth Rate	Still-birth Rate	Infant Mortality Rate	Neonatal Mortality Rate	Perinatal Mortality Rate	(Adjusted) Death Rate
1956-60	....	16.7	1.9	22.2	33.6	25.6	13.6
1961-65	....	17.5	3.3	18.6	19.5	14.1	13.3
1961	....	16.8	2.7	20.9	19.8	13.6	13.6
1962	....	17.1	3.7	21.6	14.7	12.9	13.7
1963	....	18.9	3.1	15.1	23.8	13.6	13.9
1964	....	18.3	4.3	15.3	22.4	15.5	28.5
1965	....	16.4	2.9	20.2	16.8	15.0	12.7
1966	....	16.2	4.5	9.1	18.5	11.1	12.6

### COMPARISON WITH OTHER AREAS—1966

	Adjusted Birth Rate	Illegitimate Birth Rate	Still-birth Rate	Infant Mortality Rate	Neonatal Mortality Rate	Perinatal Mortality Rate	Maternal Mortality Rate	Adjusted Death Rate	Comparability Births	Comparability Factors	Deaths
England and Wales	17.7	7.9	15.4	19.0	12.9	26.3	0.26	11.7	—	—	—
Administrative County of Northumberland	15.1	5.1	16.8	20.1	13.5	28.1	★ 0.13	12.9	1.00	1.05	—
Urban Districts of Northumberland	15.5	5.1	17.0	20.0	13.2	28.0	★ 0.16	13.0	0.99	1.09	—
South Area of Northumberland	14.0	4.5	10.9	17.5	12.3	21.1	★ 0.65	12.6	0.94	0.91	—
Newburn U.D.	16.2	4.5	9.2	18.5	11.1	18.3	★ 1.9	12.8	0.97	1.24	—

\* All these figures relate to a single death.

# CAUSES OF DEATH AT DIFFERENT AGES

Cause of Death	Sex	Total All Ages	Under 4 weeks	4 weeks
				and under 1 year
6. Meningococcal Infection	M.	1	—	1
	F.	—	—	—
10. Malignant Neoplasm, Stomach	M.	3	—	—
	F.	9	—	—
11. Malignant Neoplasm, Lung, Bronchus	M.	12	—	—
	F.	1	—	—
12. Malignant Neoplasm, Breast	M.	—	—	—
	F.	4	—	—
13. Malignant Neoplasm, Uterus	F.	2	—	—
14. Other Malignant and Lymphatic Neoplasms	M.	19	—	—
	F.	17	—	—
16. Diabetes	M.	—	—	—
	F.	1	—	—
17. Vascular Lesions of Nervous System	M.	23	—	—
	F.	37	—	—
18. Coronary Disease, Angina	M.	53	—	—
	F.	27	—	—
19. Hypertension with Heart Disease	M.	—	—	—
	F.	3	—	—
20. Other Heart Disease	M.	8	—	—
	F.	15	—	—
21. Other Circulatory Disease	M.	5	—	—
	F.	9	—	—
23. Pneumonia	M.	10	1	2
	F.	14	1	1
24. Bronchitis	M.	10	—	—
	F.	5	—	—
25. Other Diseases of Respiratory System	M.	2	—	—
	F.	—	—	—
26. Ulcer of Stomach and Duodenum	M.	2	—	—
	F.	—	—	—
29. Hyperplasia of Prostate	M.	1	—	—
30. Pregnancy, Childbirth, Abortion	F.	1	—	—
32. Other Defined and Ill-defined Diseases	M.	11	2	—
	F.	11	1	—
33. Motor Vehicle Accidents	M.	5	—	—
	F.	2	—	—
34. All other Accidents	M.	2	—	—
	F.	7	1	—
35. Suicide	M.	2	—	—
	F.	1	—	—
<b>TOTAL ALL CAUSES</b>	M.	<b>169</b>	<b>3</b>	<b>3</b>
	F.	<b>166</b>	<b>3</b>	<b>1</b>

**DURING 1966 IN THE URBAN DISTRICT OF NEWBURN**

Age in Years

1—	5—	15—	25—	35—	45—	55—	65—	75 and over
—	—	—	—	—	1	2	—	—
—	—	—	—	—	—	2	4	3
—	—	—	—	—	3	5	3	1
—	—	—	—	—	1	—	—	—
—	—	—	—	2	—	1	1	—
—	—	—	1	—	—	1	—	—
—	—	—	—	1	2	5	8	3
—	—	—	—	1	1	4	5	6
—	—	—	—	—	—	—	—	1
—	—	—	—	—	3	2	11	10
—	—	—	—	—	11	18	13	11
—	—	—	—	—	1	2	9	15
—	—	—	—	—	—	1	2	—
—	—	—	—	—	—	3	4	8
—	—	—	—	—	1	—	2	2
—	—	—	—	—	—	1	2	7
—	—	—	—	—	—	—	2	4
—	—	—	—	—	—	2	6	10
—	—	—	—	—	—	1	2	2
—	—	—	—	1	1	—	—	—
—	—	—	—	—	1	1	—	—
—	—	—	—	—	—	—	—	1
—	—	—	1	—	—	—	—	—
—	—	—	—	—	2	—	2	5
—	—	—	—	1	—	2	1	5
1	1	1	1	—	—	—	—	1
1	1	1	1	1	—	—	—	1
1	—	—	—	—	—	—	—	4
—	—	—	1	—	1	—	—	—
—	—	—	—	1	—	—	—	—
1	1	1	2	3	23	36	50	46
1	—	2	1	6	6	20	49	77

## Causes of Still-births

Concealed accidental haemorrhage	....	....	....	....	1
Rhesus immunisation	....	....	....	....	1
Anoxia	....	....	....	....	1
Hydrocephalus	....	....	....	....	2
					5
					—

## Causes of Infant Deaths

		Under 24 hours	Under 1 week	Under 4 weeks	4 weeks- 1 year	Total
Foetal anoxia	....	1	—	—	—	1
Prematurity	....	2	—	—	—	2
Pneumonia and bronchitis		1	1	—	3	5
Meningitis	....	—	—	—	1	1
Accidental drowning	....	—	—	1	—	1
		4	1	1	4	10

## Cause of Maternal Death

The maternal death, the first in the district since 1963, was due to post-partum haemorrhage. The woman, aged 21, was having her second confinement at home.

## Principal Causes of Death, 1966

		Number	Percentage
Cancer	....	67	20.0
Cerebro-vascular Disease	....	60	17.9
Heart and Circulatory Disease	....	120	35.8
Respiratory Disease	....	41	12.2
All other Diseases	....	28	8.4
Violence	....	19	5.7
		335	100.0

## DEATHS FROM CANCER

	Sex	25+	35+	45+	55+	65+	75+	Total
<b>SITE—</b>								
Floor of Mouth ....	M.	—	—	—	—	—	1	1
Oesophagus ....	M.	—	—	—	—	2	—	2
Stomach ....	M.	—	—	1	2	—	—	3
	F.	—	—	—	2	4	3	9
Pancreas ....	M.	—	—	—	1	—	—	1
	F.	—	—	—	—	1	1	2
Colon ....	M.	—	—	—	1	2	—	3
	F.	—	—	—	1	1	—	2
Rectum ....	M.	—	—	—	2	—	—	2
	F.	—	—	—	—	1	3	4
Lung ....	M.	—	—	3	5	3	1	12
	F.	—	—	1	—	—	—	1
Breast ....	F.	—	2	—	1	1	—	4
Uterus (Cervix) ....	F.	1	—	—	1	—	—	2
Prostate ....	M.	—	—	—	—	—	1	1
Kidney ....	M.	—	—	1	—	—	1	2
	F.	—	—	—	—	1	—	1
Bladder ....	M.	—	—	—	—	2	—	2
	F.	—	—	—	1	1	—	2
Skin ....	M.	—	—	—	1	1	—	2
Primary site unknown	M.	—	1	—	—	1	—	2
	F.	—	—	—	1	—	2	3
Sarcoma of Broad Ligament ....	F.	—	1	—	—	—	—	1
Hodgkin's Disease	F.	—	—	—	1	—	—	1
Cerebral Tumour	M.	—	—	1	—	—	—	1
	F.	—	—	1	—	—	—	1
<b>TOTAL</b> ....	M.	—	1	6	12	11	4	34
	F.	1	3	2	8	10	9	33

## TUBERCULOSIS

Age Periods	New Cases Notified				Inward Transfers			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 5 years ....	—	—	—	—	—	—	—	—
5—14 years ....	—	—	—	—	—	—	—	—
15—24 years ....	—	—	—	—	—	—	—	—
25—44 years ....	2	—	—	—	—	—	—	—
45—64 years ....	2	—	—	—	—	—	—	—
65 years and over ....	3	—	—	—	1	—	—	—
	7	—	—	—	1	—	—	—

### COMPARISON WITH PREVIOUS YEARS

Year		New Cases	Inward Transfers	Deaths
Average 1946-50	....	38	—	13
„ 1951-55	....	37	17	5
„ 1956-60	....	20	13	2
„ 1961-65	....	16	4	1
1961....	....	16	5	3
1962....	....	12	5	2
1963....	....	19	5	1
1964....	....	17	3	—
1965....	....	18	3	1
1966....	....	7	1	—

## TUBERCULOSIS REGISTER, 1966

	Number of cases on register at commencement of year	Number of cases notified for the first time	Inward transfers	Number of cases remaining on register at end of year			
				Non-Pulmonary	Pulmonary	Non-Pulmonary	Pulmonary
Males ....	101	12	7	—	1	—	71
Females ....	70	19	—	—	—	1	52

During the year the tuberculosis register, which had become out of date, was revised with the help of the chest clinics and as a result 119 names were removed.

# INFECTIOUS DISEASE

NOTIFICATIONS RECEIVED, 1966

DISEASE	AGE						Total
	0-1	1-4	5-14	15-44	45-64	65+	
Measles ....	5	92	60	—	—	—	157
Scarlet Fever ....	—	2	7	—	—	—	9
Dysentery ....	—	—	1	—	—	—	1
Whooping Cough ..	—	1	—	—	—	—	1
Acute Pneumonia ..	—	—	—	—	3	1	4
Erysipelas ....	—	—	—	1	—	—	1
Acute Encephalitis	—	1	—	—	—	—	1

MONTH OF NOTIFICATION

Disease	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Measles ....	—	—	1	—	1	5	36	21	4	7	24	58	157
Scarlet Fever ....	1	1	1	1	—	—	—	—	1	1	1	2	9
Dysentery ....	—	—	—	—	—	—	—	—	—	1	—	—	1
Whooping Cough	—	—	—	—	—	—	—	1	—	—	—	—	1
Acute Pneumonia	2	—	—	1	—	—	1	—	—	—	—	—	4
Erysipelas ....	—	—	—	—	—	—	—	—	—	—	1	—	1
Acute Encephalitis ....	—	—	—	—	—	—	—	—	1	—	—	—	1

## **Encephalitis**

One child developed this disease as a complication of measles.

## **Dysentery**

Only one case, at Lemington, was notified. Some children attending Throckley school who lived outside the district were also affected but no spread occurred in the school.

## **Smallpox**

No contacts of the outbreak of mild smallpox in the Midlands reached this district. During this outbreak the Spanish and certain other Governments required that all travellers from the United Kingdom should have a valid vaccination certificate. During the four months May to August, 1966, we were asked to authenticate 703 vaccination certificates, compared with 72 in the corresponding period of 1965. The excess of 630 was presumably accounted for by people going to Spain or other countries on a short holiday. So we can presume that an additional 5% of the population are now protected against smallpox.

## **Leprosy**

This disease became notifiable to the district Medical Officer of Health on 1st March, 1966. Previously it had been notifiable to the Chief Medical Officer of the Ministry of Health who had about 340 cases on his register for the whole of England and Wales. About 40 cases come to light annually and most of these have contracted the infection abroad. The problem is greatest in areas with large numbers of coloured immigrants. The infectivity of the leprosy bacillus is low and it is highly unlikely that it could spread in this country at the present time.

## IMMUNISATION AND VACCINATION

Immunisation and Vaccination are given according to the following schedule:

Visits	Age	Vaccine
1	3 months	Triple Antigen (Diphtheria, Tetanus and Whooping Cough) and Oral Poliomyelitis.
2	4 months	Triple Antigen.
3	5 months	Triple Antigen and Oral Poliomyelitis.
4	7 months	Oral Poliomyelitis.
5	1-2 years	Smallpox vaccination.
6	2 years	Triple Antigen and Oral Poliomyelitis.
7	4-5 years	Diphtheria/Tetanus, Oral Poliomyelitis.
8	8-10 years	Diphtheria/Tetanus.
9	10-12 years	B.C.G. (to those negative to skin test).

The table below gives the number of children immunised. Visits to schools are in general made once every two years so that there is some unevenness in the numbers of children done in the older age groups.

	YEAR OF BIRTH							Total
	1966	1965	1964	1963	1959-62	1950-58		
Primary Diphtheria/Pertussis/ Tetanus*	179	250	11	3	11	5		459
Primary Tetanus combined with reinforcing Diphtheria	—	1	—	—	6	179		186
Reinforcing Diphtheria/ Pertussis/Tetanus	—	4	300	79	89	6		478
Reinforcing Diphtheria/ Tetanus†	—	—	7	6	429	314		756
Primary Poliomyelitis	151	315	25	13	19	5		528
Reinforcing Poliomyelitis	—	4	292	65	332	28		721
Primary Smallpox Vaccination	18	109	26	10	9	12		184
Re-vaccination	—	1	1	1	14	20		37
B.C.G. Vaccination	—	—	—	—	—	134		134

\* Including a small number where only diphtheria/tetanus was given.

† Including a small number where only diphtheria or only tetanus was given.

## AIR POLLUTION

Air pollution and its effect upon health is a complex matter, but over the last 15 years great advances have been made in the understanding of the subject. It has been thought worth while to set down some facts, figures and comments derived mainly from the work of others, and I have borrowed from writings in science and technology as well as in medicine. Three aspects of the situation will be dealt with. Firstly, the patterns in the consumption of fuel and the pollutants produced. In this I am very much indebted to the writings of Dr. Albert Parker in various journals. Secondly, some local measurements of smoke and sulphur dioxide for the past few years are given, and for these I would like to thank Mr. Corney, Mr. Strachan and Mr. Mair. Lastly, the death rates for bronchitis and lung cancer for various areas kindly supplied by the Medical Officers of Health concerned are looked at, although many reservations have to be made in the study of these figures.

### The Consumption of Fuel

Apart from grit produced by some industrial processes, air pollution is a result of the consumption of fuel. Considerable change has taken place in the use of fuel over the last few years. While the total fuel consumed has increased, there has been a big move away from coal, which has been much more marked in London and the South of England.

MAIN TYPES OF FUEL USED  
(All figures in millions of tons)

				1938	1956	1965
Coal	....	....	....	176	215	182
Oil	....	....	....	12	36	98
Hydro Electricity	....	....	....	1	1	2
Nuclear Energy	....	....	....	—	—	6
Natural Gas	....	....	....	—	—	1
				189	252	289

The figures given for fuels other than coal are coal equivalents. One ton of oil is equivalent to 1.7 tons of coal.

Estimates of the amount of pollutants produced by the various classes of fuel have been made and a table produced by Dr. Albert Parker is given below:—

ESTIMATES OF AIR POLLUTION IN GREAT BRITAIN IN 1965

(All figures in millions of tons)

Fuel and Class of Consumer	Quantity of Fuel	POLLUTANTS DISCHARGED		
		Smoke	*Grit Dust	Sulphur Dioxide
<b>COAL—</b>				
Domestic .... ....	27.3	0.9	0.1	0.71
Electricity Works....	69.3	Small	0.3	2.12
Railways .... ....	2.8	0.06	0.1	0.08
Industrial .... ....	39.0	0.14	0.3	1.12
Coke Ovens .... ....	25.7	Small	Small	0.09
Gas Works .... ....	18.0	Small	Small	0.13
	182.1			
<b>COKE—</b>				
Domestic .... ....	6.3	Nil	Small	0.14
Industrial, etc. .... ....	6.9	Nil	Small	0.17
		1.1	0.8	4.55
<b>OIL—</b>				
Domestic .... ....	2.1	Small	Nil	0.01
Industrial, etc. .... ....	36.6	Small	Nil	1.76
Road and Rail Vehicles....	15.5	Small	Nil	0.07
Marine Craft .... ....	1.1	Small	Nil	0.04
	55.3			1.88
<b>TOTAL FOR COAL AND OIL ....</b>		<b>1.1</b>	<b>*0.8</b>	<b>6.43</b>

\* In addition, 0.4 million tons of grit are produced by other industrial processes.

From this it will be seen that the domestic fire produces three-quarters of the total smoke and half the total smoke and grit, even although it only accounts for one-tenth of the total fuel consumed.

The figures for smoke and sulphur dioxide produced in various years are also of interest.

SMOKE AND SULPHUR DIOXIDE IN MILLIONS OF TONS

		1938	1956	1965
Smoke—Coal	....	2.71	2.25	1.10
,,	Oil	—	—	—
Sulphur Dioxide—Coal and Coke..		4.07	4.80	4.55
,,	,,	0.06	0.53	1.88
		—	—	—
		4.13	5.33	6.43
		—	—	—

The big reduction in the amount of smoke between 1956 and 1965 has been achieved by a 75% reduction by industry and less than 20% by domestic consumers. Basically, it represents a voluntary move away from coal but clean air zones and the law against black smoke have also played a part. Industry has, of course, a strong economic motive to use fuel as efficiently as possible. The domestic consumer has the same economic motive but capital costs are often a strong deterrent in spite of the grants available in smoke control areas. Local shortages of certain types of fuel have been a major stumbling block.

The total amount of sulphur dioxide produced has increased by 50% since 1938. While the total figures for coal and oil are given, there is wide variation in the amount of sulphur dioxide produced by various kinds and qualities of each fuel. For instance, more sulphur dioxide is produced per ton of coal burned at power stations than per ton burned on a domestic grate. This is because of the more complete combustion of the fuel and because lower-quality coal is used at power stations. Measurements of sulphur dioxide in the atmosphere fortunately do not show this increase, and in fact even although the total sulphur dioxide produced has increased by 20% in the last 10 years the average measurement of the gas in the atmosphere has gone down also by 20%. This is because in the absence of smoke more of the sulphur dioxide diffuses into the upper atmosphere. Also an increasing proportion of the sulphur dioxide is produced by industry and power stations, and the proper siting of these, e.g., Blyth Power Station, can lead to the dispersal of the gas where it will do little harm. Unfortunately, the siting of the Stella Power Stations is such that the sulphur dioxide and some of the grit produced falls in a highly populated area. Between them the two Stella Power Stations consumed almost 1,500,000 tons of coal in 1966, i.e., more than in all the domestic fires on Tyneside. This means that some 40,000 tons of sulphur dioxide are liberated annually.

The amount of grit produced is some 258,500 tons annually but the grit arresting process is 98% efficient, which means that some 5,400 tons are discharged into the atmosphere each year. The grit particle size is so small that dispersal is over a very wide area.

## Local Measurements

Measurement of smoke and sulphur dioxide is taking place at over 1,100 centres throughout the country and 20 of these are on Urban Tyneside. Readings are affected by a large number of variable factors, the chief ones being weather conditions and the seasonal use of domestic fuels. At each centre local factors have to be considered, e.g., at Newburn the withdrawal of steam locomotives on the Hexham line has led to a fall in the smoke readings. At Westerhope the large number of new buildings in the area has to be taken into consideration. At Shipley Street, on the other hand, clearance has substantially reduced the number of dwellings in the area. Blakelaw became a smoke control area on 1st July, 1965.

### AVERAGE YEARLY FIGURES FOR CERTAIN CENTRES

Smoke in micrograms per cubic metre:—

Year	Newburn	Westerhope	Blakelaw	Shipley Street	Ponteland
1961 ....	203	187	—	—	—
1962 ....	165	168	182	349	—
1963 ....	133	136	176	350	—
1964 ....	127	129	195	383	—
1965 ....	134	152	145	376	—
1966 ....	59	134	96	234	44

SO<sub>2</sub> in micrograms per cubic metre:

Year	Newburn	Westerhope	Blakelaw	Shipley Street	Ponteland
1961 ....	70	93	—	—	—
1962 ....	75	82	124	247	—
1963 ....	98	90	92	229	—
1964 ....	91	95	78	221	—
1965 ....	99	111	97	201	—
1966 ....	122	125	77	174	39

## MONTHLY READINGS AT WESTERHOPE

	Smoke			SO <sub>2</sub>		
	1964	1965	1966	1964	1965	1966
January ....	111	221	279	199	76	222
February ....	172	158	223	135	66	174
March ....	195	208	107	148	160	98
April ....	101	142	117	135	85	109
May ....	84	141	84	77	84	89
June ....	42	106	86	78	75	114
July ....	28	70	52	90	58	71
August ....	42	82	100	39	84	71
September ....	54	85	102	51	116	104
October ....	149	211	138	66	241	140
November ....	231	169	157	84	132	173
December ....	263	225	164	81	154	129

### Road Vehicles

10.74 million tons of petrol and 3.84 million tons of diesel fuel were consumed in 1965. This is 8.6% of the total fuel consumed.

Pollutants arising from these fuels will not add appreciably to general atmospheric pollution but there are dangers of high concentrations on main roads and in garages. The pollutants most likely to cause concern are black smoke, hydrocarbons and carbon monoxide. Other toxic substances are lead, sulphur dioxide, sulphuric acid, aldehydes derived from fuel or fuel additives, and oxides of nitrogen produced by the fixation of atmospheric nitrogen.

All these substances are being measured on busy roads, in garages, and also in industry where oil is used. So far, concentrations have not reached levels considered to be dangerous although some concern has been felt about the amount of carbon monoxide on main roads.

The health of persons such as policemen and garage attendants, who are most exposed to petrol and diesel fumes, is being closely watched. So far there has been no evidence of any added health risk in these occupations.

In certain American cities, particularly Los Angeles, concentrations of pollutants have reached much higher levels than any in this country. As yet there has been no proof of any added health risk among the inhabitants of these cities.

The situation with regard to vehicle exhausts has obviously got to be kept under review. No recognisable public health hazard has yet appeared, but it has of course to be remembered that the danger of cigarette smoking did not become apparent until large numbers of persons had been smoking for 30 or 40 years.

## Cost of Air Pollution

The Beaver Committee (1954) made estimates of the cost of air pollution in addition to the health risks. These estimates were tentative and have since been thought to have been too conservative. Costs come under three main headings:—

(1) DIRECT COSTS—				<i>£m per annum</i>
Excess Laundry .... .... .... ....				25
Excess Painting and Decorating .... ....				30
Damage to Materials—				
Buildings .... .... .... ....				20
Metals .... .... .... ....				25
Textiles .... .... .... ....				50
				—150 m.
(2) LOSS OF EFFICIENCY COSTS—				
Agriculture .... .... .... ....				10
Manufacturing .... .... .... ....				55
Transport .... .... .... ....				60
				—125 m.
(3) INCOMPLETE COMBUSTION OF FUEL.... ....				25 m.
				<hr/> <i>£300,000,000</i> <hr/>

The cost is estimated at £10 per head in the black areas and £5 per head elsewhere.

## Progress of Smoke Control on Urban Tyneside

Local Authority	Total Number of Premises	Premises under Smoke Control	% Premises Controlled
Felling U.D. ....	13,000	4,280	32.92
Newburn U.D. ....	10,881	2,662	24.46
Newcastle C.B. ....	99,333	21,417	21.56
Hebburn U.D. ....	9,184	1,947	21.19
Wallsend M.B. ....	17,505	3,247	18.54
Jarrow M.B. ....	9,740	1,131	11.61
Gateshead C.B. ....	37,603	3,511	9.31
Blaydon U.D. ....	12,302	808	6.57
Whitley Bay M.B. ....	14,776	797	5.39
Whickham U.D. ....	9,852	457	4.63
Gosforth U.D. ....	10,077	Nil	Nil
Longbenton U.D. ....	16,462	Nil	Nil
Ryton U.D. ....	5,398	Nil	Nil
South Shields C.B. ....	41,011	Nil	Nil
Tynemouth C.B. ....	27,040	Nil	Nil
<b>TOTALS ....</b>	<b>334,164</b>	<b>40,257</b>	<b>12.04%</b>

## Air Pollution and Health

The diseases most clearly associated with air pollution are bronchitis and lung cancer, and some national and local figures are given below:—

DEATH RATES PER 100,000, 1961-65

		Bronchitis (all forms)	Cancer of Lung, Bronchus
England and Wales	....	67	53
Newcastle upon Tyne County Borough	....	86	77
Northumberland (Admin. County)	....	64	49
Urban Districts of Northumberland	....	69	52
Rural Districts of Northumberland	....	49	40
Newburn Urban District	....	49	41
Hexham and Bellingham Rural Districts	....	34	42

In England and Wales during 1961-65, 158,297 persons (112,943 males and 45,354 females) died from bronchitis, and 122,742 persons (104,202 males and 18,540 females) died from cancer of the lung. For the latter disease the number of deaths has been increasing by about 1,000 per annum.

In comparing the figures for different districts various factors have to be taken into consideration. For instance, if an adjustment is made for the age of the population the difference between the urban and rural areas of Northumberland becomes more marked.

The figures for Newburn are low. This is partly accounted for by the fact that the population of this district is younger than average and if an adjustment were made for age this would bring the figures up to about 60 for bronchitis and 50 for cancer of the lung. On the other hand, there is a lot of heavy industry in the district and if an adjustment were made for social and occupational factors this would bring the figures back down again. No doubt the favoured position of Newburn on the windward side of Urban Tyneside and the scattered nature of the district are the main factors.

The death rates from bronchitis give a very limited picture. For every 1,000 deaths where bronchitis is given as the primary cause there are almost as many again where it is given as an associated cause. The number of deaths is only a tiny percentage of the total prevalence. Various surveys have shown that bronchitis is the commonest cause of absence from work among men and also the commonest reason for men consulting their general practitioner.

While international comparisons have to be made with reserve, it would appear that Britain has ten times as many deaths from bronchitis as the United States, France or the Scandinavian countries. Abroad bronchitis is sometimes known as the English disease. It should, however, be regarded as a group of diseases rather than a single entity. The causes

can be simply stated as constitution of the individual, infection and the inhalation of foreign matter. Infection of many types leads to bronchitis, and chronic bronchitis more often results from repeated minor infections rather than one or two severe infections. The inhalation of foreign matter can be divided into

Personal air pollution	....	....	smoking;
Public air pollution	....	....	domestic exposure, occupational exposure.

Population studies of bronchitis show it to be associated with "the less well paid, the less skilled and those living in less pleasant surroundings." The death rate in heavy cigarette smokers is six times that of non-smokers. The contrast between the figures for Newcastle upon Tyne and Hexham and Bellingham rural districts indicates the increased hazard of an urban environment.

The ultimate cause of cancer of the lung is not known but the outstanding association is with cigarette smoking, the death rate of heavy cigarette smokers being thirty times that of non-smokers. However, the disease is almost twice as common in cities as in rural areas and there is a less marked association with the various other factors leading to bronchitis.

All this has been stated in some detail as it is considered to be the outstanding problem of environmental health in Britain in the 20th century. The improvements in water supply, food and sanitation in the last century have led to a great reduction in death and illness from bowel diseases. The rewards in improvement in health by the reduction of air pollution are likely to be much greater and it is good to know that Newburn, having made substantial advance along the road towards making the area smoke free, is continuing this good work until it is completed.

# Annual Report of the Senior Public Health Inspector

*To the Chairman and Members of the Council.*

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have pleasure in presenting my Report for the year 1966 and would first comment on staff changes. Mr. George Graham resigned to take an appointment in Cornwall and, with a previous vacancy remaining unfilled, the department's establishment was two short. Mr. McConville and Mr. Jones were appointed in August, after amended advertisements offering increased salaries, one vacancy having remained unfilled for fifteen months. Both were previously employed by authorities within the Tyneside conurbation and it seems that indecision about the future pattern of Local Government is preventing officers from outside the area applying for vacancies. Generally the shortage of inspectors will continue unless more authorities undertake the training of pupils, and this is a matter to which the appropriate authorities might give some attention.

With the department at full strength it was possible to carry out a greater number of inspections, particularly under the Offices, Shops and Railway Premises Act, 1963. Conditions for employees in offices and shops throughout the district were found to be reasonable but improvements were effected particularly in standards of cleanliness. The provision of thermometers and first aid requisites was required in a number of premises. Three accidents were reported, two in retail shops and one in a warehouse but, fortunately, none was of a serious nature.

Some 260 food hygiene inspections were made and 10 notices were served to secure compliance with the regulations. There was a welcome reduction in the number of cases of foreign matter in food compared with the previous year.

In the field of housing 48 families were rehoused during the year from unfit dwellings but it was not possible to commence rehousing from the Lloyd Street area of Lemington because of delay in building on the Union Hall site formerly occupied by prefabricated bungalows. As a result of both informal and formal action, 138 houses were made fit.

Applications for Improvement Grants continued steadily and a number of sound dwellings were modernised by this means. There remain many more houses which would attract grant but there are not many so situated as to lend themselves to improvement area schemes. The problem of "twilight houses" is likely to remain with us for some time unless an amendment is made to the relatively low standards of condemnation in

Section 4 of the Housing Act, 1957. The Council's house-building programme for the next few years includes sufficient dwellings to rehouse the tenants of almost all of these "twilight houses," in addition to satisfying the general needs list of applicants and it would seem unsatisfactory to attempt to lengthen the life of such property by the installation of even minimum amenities in these circumstances.

Action under the Clean Air Act, 1956, continued, further smoke control areas coming into operation at North Avenue, Westerhope, in January, and at Westerhope/West Denton Comprehensive Development Area and Dumpling Hall Farm Estate in July. Some 200 houses were inspected in that part of the district between the Royal French Arms and Throckley Crossroads with a view to their being included in a smoke control area as soon as financial conditions permit. The increased cost of conversions of heating appliances because of the shortage of soft coke has had an adverse effect on the progress of smoke control area programmes, and this is most unfortunate from the public health point of view. A table showing the position with regard to smoke control areas is included in the report.

The refuse collection and salvage services maintained a weekly collection throughout the year, despite difficulties due to absence of staff through sickness. Some embarrassment was caused by the sudden imposition towards the end of the year of restrictions by the Board Mills on the amount of salvage they would accept but even so the total income received from the sale of waste paper was in excess of £4,200. The paper sack system was extended to new housing estates at West Denton Hall and Dumpling Hall Farm, as well as to the new buildings at the Council's Leazes site at Throckley, and at the end of the year approximately 1,900 houses were included in the scheme. The system is working successfully and has been appreciated by both the householders and the refuse collectors.

I wish to record my thanks to Mr. Gray, the foreman, and the refuse collection staff for the efficient manner in which they performed their duties.

Mr. P. A. Charlton was appointed in August on a part-time basis as Rodent Operative and this enabled Mr. Gray, who had formerly carried out this work, to devote all his time to the supervising of the refuse collection service. 231 premises were treated for rat or mouse infestation.

Thanks are also due to the staff of the department for the ready assistance they have rendered, and I conclude with expressing my gratitude to Dr. Smith and the other chief officers for their co-operation and to Mrs. Watson and members of the Health Committee for their interest and encouragement.

I am,

Yours faithfully,

J. CORNEY,

*Senior Public Health Inspector.*

## INSPECTIONS OF DISTRICT

<i>Nature of Inspections:</i>	VISITS
Clean Air Act ....	277
Clearance Areas....	23
Disinfestation ....	208
Factories Act ....	54
Food and Drugs Act ....	24
Food Hygiene ....	261
Food Inspection	19
Housing ....	931
Ice Cream Samples	5
Infectious Disease	50
Meat Inspection	51
National Assistance Act—Section 47	10
Nuisances ....	34
Offices, Shops and Railway Premises Act ....	282
Refuse Collection	515
Rodent Control	152
Smoke Control Areas ....	423
Special ....	136
Shops Act	9
 Total Visits for 1966	 3,464

# HOUSING STATISTICS FOR YEAR 1966

New Houses completed during the year	With State Assistance	Unaided	Total
(a) By Local Authority ....	99	—	99
(b) By any other Housing Authority ....	—	—	—
(c) By Private Persons ....	—	264	264

Total number of inhabited houses in District .... 10,362  
 Total number of houses owned by Local Authority .... 3,098

## CLOSING AND DEMOLITION.

(1) Houses demolished in Clearance Areas ....	....	....	Nil
(2) Houses demolished not in Clearance Areas	....	....	52
(3) Houses closed, not demolished ....	....	....	6
(4) Any other houses permanently discontinued as dwellings and not included above ....	....	....	Nil

## REPAIRS.

Houses made fit			
(5) By informal action ....	....	....	99
(6) By owners, following statutory notice ....	....	....	39
(7) By Local Authority in default of owners....	....	....	Nil
(8) Demolition Orders revoked after reconstruction ....	....	....	Nil
(9) Houses in Clearance Areas patched for temporary accom- modation ....	....	....	Nil

## IMPROVEMENT GRANTS.

### (a) Discretionary.

(1) Applications submitted to Local Authority during year....	....	....	10
(2) Applications rejected ....	....	....	Nil
(3) Applications approved ....	....	....	10
(4) Approximate average grant approved per house ....	....	....	£305
(5) Total number of houses approved for grant in area since inception of scheme ....	....	....	297

### (b) Standard.

	During the year	Total to date
(1) Number of separate houses for which grants have been made ....	29	213
(2) Number of houses so provided with:—		
(i) Bath or shower ....	16	134
(ii) Wash hand basin	16	146
(iii) Hot water supply	15	126
(iv) Water closet ....	25	176
(v) Food store ....	9	96

# CLEARANCE AREA PROGRAMME, 1956

YEAR 1966

	Location	No. of houses to be demolished	Remarks	
1st Year	Bank Top, Throckley ....	29	Rehoused	1957/58
	Fireman's Row, Newburn ....	12	„	1957/58
	Chapel Row, North Walbottle	11	„	1956/57
2nd Year	Laurel Street, Throckley ....	20	„	1958
	Maple Street, Throckley ....	26	„	1959/60
	Sycamore Street, Throckley ....	26	„	1958/59
3rd Year	Beech Street, Throckley ....	19	„	1960
	Ash Street East, Throckley ....	5	„	1960
	Elm Street, Throckley ....	26	„	1962
	Ash Street, Throckley ....	15	„	1963
4th Year	Coronation Row, North Walbottle	10	„	1963
	The Green, Low Square, School Bank, and Queen's Row, Walbottle .... ....	21	18 (3 empty)	1964/65
	Walbottle Village .... ....	21	17 (4 empty)	1964/65
	Northumberland Terrace, Newburn .... ....	11	„	1963
	Pit Bank and Paper Mill, Scotswood .... ....	12	„	1957/61
5th Year	Albert Terrace, Newburn ....	19	„	1964
	Victoria Terrace, Newburn ....	17	„	1964
	Pit Cottages, Throckley ....	26	„	1963/64
6th Year	Temporary Prefabricated Bungalows, Lemington ....	50	„	1964
	Mount Pleasant, Throckley ....	68	64 (4 empty)	1964/65
	Permanent Prefabricated Bungalows, Lemington ....	70	„	1965/66
7th Year	Union Street, Lemington ....	43		
	Stanley Street, Lemington ....	41		
8th Year	Lloyd Street, Lemington ....	24		1966
	Dene Terrace, Walbottle ....	31*		
	North View, North Walbottle ....	18		

\* Delete, Improvement Grants authorised, after repair work completed.

*Individual unfit houses dealt with.*

Number	Year
6 .....	1957
2 .....	1958
5 .....	1959
3 .....	1960
4 .....	1961
1 .....	1962
6 .....	1963
— .....	1964
1 .....	1965
1 .....	1966

# FACTORIES ACT, 1961

## PART I OF THE ACT

### 1. INSPECTIONS for purposes of provisions as to Health.

Premises (1)	Number on Register (2)	Number of		
		Inspections (3)	Written Notices (4)	Occupiers Prosecuted (5)
(1) Factories in which Sections 1, 2, 3, 4, and 6 are to be enforced by Local Authority ....	2	1	—	—
(2) Factories not included in (1) in which Section 7 is enforced by the Local Authority ....	59	53	—	—
(3) Other Premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises) ....	6	—	—	—
<b>TOTAL</b> ....	<b>67</b>	<b>54</b>	—	—

Particulars	Number of Cases in which Defects were found				Number of Cases in which Prosecutions were instituted
	Found	Remedied	Referred To H.M. Inspector	By H.M. Inspector	
Ineffective drainage of floors (S.6) ....	—	—	—	—	—
Sanitary Conveniences (S.7)					
(a) Insufficient ....	1	—	—	—	—
(b) Unsuitable or defective ....	2	2	—	—	—
(c) Not separate for sexes ....	—	—	—	—	—
<b>TOTAL</b> ....	<b>3</b>	<b>2</b>	—	—	—

## PART VIII OF THE ACT

### OUTWORK (Section 133)

Nature of Work	No. of Out-workers in August list required by Section 133 (1) (c)	No. of cases of default in sending lists to the Council	No. of Prosecutions for failure to supply lists
Wearing apparel :			
Making, etc. ....	3	—	—
Cleaning and washing	—	—	—
Doll's Clothing ....	1	—	—
<b>TOTAL</b> ....	<b>4</b>	—	—

## FOOD AND DRUGS ACT, 1955

### (a) UNSOUND FOOD—SECTION 2

Loaf of bread found to contain old dough. Manufacturer fined £10 with £9 3s. costs.

### (b) MILK SUPPLIES—*Brucella Abortus*

Samples of milk retailed in the Urban District are taken by the County Health Inspector. Thirty-four samples were submitted for examination, two of these being for *Brucella Abortus*, both being negative.

### (c) LIQUID EGG (PASTEURISATION) REGULATIONS, 1963

There are no egg pasteurisation plants in the district.

### (d) FOOD HYGIENE (GENERAL) REGULATIONS, 1960

The total number of food premises subject to these regulations is 127 shops plus 22 canteens, 14 public houses and one mussels bottling factory. The premises are grouped in categories of trade, compliance with Regulations 16 and 19 being set out.

Type of Premises	No.	Reg. 16	Reg. 19
Baker ....	4	3	4
Butcher ....	17	16	17
Cafés ....	2	2	2
Canteens ....	22	22	22
Confectioner ....	19	19	19
Fried Fish ....	10	10	10
General ....	24	23	23
Greengrocer ....	14	14	14
Grocer ....	36	34	36
Mussels ....	1	1	1
Public Houses ....	14	11	13
Wet Fish ....	1	1	1

The number of premises registered under Section 16 of the Food and Drugs Act, 1955, is as follows:—

Butcher ....	....	....	17
Fried Fish ....	....	....	10
Ice Cream ....	....	....	66
Mussels ....	....	....	1
			—
			94
			—

(c) POULTRY INSPECTION

There are no poultry processing premises within the district.

(f) FOOD INSPECTIONS

Unsound Food	Surrendered
Tins of Meat Products ....	95 tins
Cooked Meat and Meat Products	88 lb.
Tins of Fruit and Vegetables ....	68 tins 7 lb.
Other Foods ....	8 tins 44 lb. ½ gall.

(g) MILK AND DAIRIES (GENERAL) REGULATIONS, 1959

Number of Registered Dairies	....	....	4
Number of Registered Distributors	....	....	43

(h) ICE CREAM PREMISES

Number on Register at commencement of year	66
Number on Register at end of year ....	66

(i) SLAUGHTERHOUSES

Number of Registered Slaughterhouses	....	1
--------------------------------------	------	---

(j) MEAT INSPECTION

Number of carcases inspected:—

CATTLE	SHEEP	PIGS
306 .....	748 .....	50

Small quantities of condemned meat are disposed of on the Council's refuse tip under the supervision of the foreman. Larger quantities, after staining, are removed by a firm of chemical manufacturers for treatment.

## OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963

### REGISTRATIONS AND GENERAL INSPECTIONS

Class of Premises (1)	Number of Premises Registered during the year (2)	Number of Registered Premises at end of year (3)	Number of Registered Premises receiving a general inspection during the year (4)
Offices .... ....	—	19	7
Retail Shops .... ....	9	129	129
Wholesale Shops and Warehouses .... ....	—	2	—
Catering Establishments open to the public, and Canteens.... ....	—	21	13
Fuel Storage Depots .... ....	—	—	—
<b>TOTALS</b> .... ....	9	171	149

### ANALYSIS OF CONTRAVENTIONS

Section	Number of Contraventions found
4 Cleanliness .... .... .... .... ....	9
6 Temperature .... .... .... .... ....	16
9 Sanitary conveniences .... .... .... .... ....	28
10 Washing facilities .... .... .... .... ....	8
16 Floors, passage and stairs .... .... .... .... ....	5
17 Fencing exposed parts of machinery .... .... .... .... ....	3
24 First Aid general provisions .... .... .... .... ....	26
<b>TOTAL</b> .... .... .... .... ....	95

## WATER SUPPLY

Water is supplied throughout the Urban District by the Newcastle and Gateshead Water Company. The supply has been satisfactory as regards both quality and quantity and I am grateful to Dr. Palin, Chemist and Analyst of the Company, for supplying the following statistics:—

### “BACTERIOLOGICAL EXAMINATION:

1,231 works control samples from the Whittle Dene and Henderson Filters were examined in the Company's Laboratory. Of these, two were of 'unsatisfactory' quality, one 'suspicious,' five 'satisfactory' and the remainder 'excellent.'

Other samples examined included:

318 samples taken from special fixed sampling points in Newcastle.

77 samples taken at random in the area.

All of these were 'excellent'."

## CLEAN AIR ACT, 1956

### SMOKE CONTROL AREAS

	Name or Description of Area	Acreage	No. of Properties
<b>In Operation :</b>	Newburn No. 1 (Throckley), October, 1962 .... .... ....	128.0	856 (1,200)
	Newburn No. 2 (West Denton), October, 1961 .... .... ....	190.0	1,450 (1,700)
	Newburn No. 3 (West Denton), September, 1963 .... .... ....	22.0	204
	Newburn No. 4 (Westerhope West Denton), July, 1966 .... ....	222.4	60 (2,000)
	Newburn No. 5 (West Avenue), January, 1966 .... .... ....	4.8	46 (55)
	Newburn No. 6 (South Denton), July, 1966 .... .... ....	11.0	66 (100)
<b>Confirmed, but not yet in Operation :</b>	Newburn No. 7 (Walbottle), August, 1967 .... .... ....	14.0	68
	Newburn No. 8 (Lemington), August, 1967 .... .... ....	31.0	6 (282)

NOTE: The figures in brackets refer to the estimated number of properties which will be included in smoke control areas when the housing estates are completed.

## PREVENTION OF DAMAGE BY PESTS ACT, 1949

The following return is forwarded to the Ministry of Agriculture, Fisheries, and Food relating to action taken during the year ended 31st December, 1966.

	TYPE OF PROPERTY				
	Non-Agricultural				Agricultural
	Local Authority (1)	Dwelling-houses (including Council Houses) (2)	All other (including Business Premises) (3)	Totals (4)	
1. Number of properties in Local Authority's district .... ....	16	10,157	1,022	11,195	26
2. Number of properties inspected as a result of notification ....	4	205	22	231	1
Rats { Major ....	—	—	4	4	1
{ Minor ....	4	173	12	189	1
Mice { Major ....	—	3	1	4	—
{ Minor ....	—	29	5	34	—
3. Number of properties inspected in the course of survey under the Act .... ....	6	—	—	6	—
4. Number of properties otherwise inspected (e.g., when visited primarily for some other purpose) ....	5	477	375	857	—
5. Number of infested properties (in Sections 2, 3, and 4) treated by the Local Authority ..	4	205	22	231	—
6. Number of notices served under Section 4 of the Act .... ....	—	—	—	—	—
7. Number of cases in which default action was taken .... ....	—	—	—	—	—
8. Number of "Block" control schemes carried out .... ....			23		

# PUBLIC CLEANSING COSTING RETURN, 1966-67

Particulars	Collection	Disposal	Total
	£	£	£
<b>GROSS EXPENDITURE—</b>			
Labour .... .... ....	.... 14,872	1,985	16,857
Transport .... .... ....	.... 8,604	2,737	11,341
Plant, Equipment, Land and Buildings..	3,417	221	3,638
 Total Gross Expenditure ....	 .... 26,893	 4,943	 31,836
<b>GROSS INCOME</b> .... .... ....	.... 461	4,580	5,041
 NET COST .... .... ....	 .... 26,432	 363	 26,795
 Capital Expenditure met from Revenue....	 1,087	 —	 1,087
 <b>UNIT COSTS—</b>	 s. d.	 s. d.	 s. d.
Gross cost per ton—Labour only	.... 27 3	3 8	30 11
Gross cost per ton—Transport only	.... 15 9	5 0	20 9
Net cost (all expenditure) per ton	.... 48 6	0 8	49 2
 <b>Net cost per 1,000 population</b> ....	 .... 814	 11	 825
<b>Net cost per 1,000 premises</b> ....	.... 2,356	32	2,386

## OPERATIONAL STATISTICS

Area (statute acres)—land and inland water	....	....	4,648 acres
Population at 30th June, 1966	....	....	32,480 persons
Total refuse collected	....	....	10,900 tons
Weight (cwt.) per 1,000 population per day	....	....	18.4 cwt.
Number of premises from which refuse is collected	....	....	11,221 premises
Premises from which collections are made at least at once-weekly intervals	....	....	100%
Average haul, single journey, to final disposal point	....	....	2½ miles
Kerbside collection (if practised)....	....	....	Nil
Total refuse disposed of ....	....	....	10,900 tons

### Method of disposal (salvage excluded)—

Controlled tipping	....	....	....	100%
--------------------	------	------	------	------

### SALVAGE.—Analysis of income and tonnage—

	Income	Tonnage
	£	tons
(a) Raw kitchen waste ....	.... —	—
(b) Scrap metal ....	.... 142	10
(c) Waste paper ....	.... 4,300	452
(d) Other salvage ....	.... 125	6
	 4,567	 468

### Trade Refuse—

(a) Income	....	....	....	....	Nil
(b) Tonnage	....	....	....	....	Nil







